

Past and Present Forestry Support Programs in the Philippines, and Lessons for the Future

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A variety of government programs have been implemented to support smallholder forestry for production and conservation purposes in the Philippines. This paper briefly outlines the arrangements of the past and current programs, notes how they have evolved over time, and provides some comments on their performance. Over about 30 years, as weaknesses have been identified in programs, the program designs have been modified. For most of this time, there has been an increasing emphasis on community involvement as distinct from industrial or individual farmer forestry. However, some of the intractable constraints on community planting have led to recent interest in individual property rights.

Keywords: community-based forestry management, individual property rights, evaluation of support programs, land tenure

INTRODUCTION

Much has been written about the severe deforestation which has taken place in the Philippines, particularly since World War 2, and of the dire need for reforestation for welfare and livelihood purposes (Kummer and Sham 1994, Pulhin 1998, Utting 2000, Guiang 2001, UNFAO and FMBDENR 2003). Large areas of forest were felled under timber license agreements in earlier years, and more recently kaingin farming (shifting cultivation) and illegal logging have taken place on remnant and logged over areas. While the Department of Environment and Natural Resources (DENR) and smallholder communities attempt to control illegal logging, this remains a difficult challenge, and in insurgency areas the government has limited control over forest exploitation.

In order to replace lost trees, protect watersheds, produce timber and non-wood

forest products, and gain community involvement in protection of forests, a number of forestry assistance programs have been introduced by the Philippines government, drawing on financial assistance from domestic and foreign governments and non-government organisations (NGOs). The number of programs which have been instituted is surprisingly large, and program arrangements many and varied. One of the objectives of the Australian Centre for International Research (ACIAR) *Smallholder Forestry Project* has been to review the past programs and the lessons they provide.

The objective of this paper is to examine what forestry support measures have been the most effective, and hence what lessons can be learned for future programs. The paper first reviews details of the various programs which have been introduced in the past. The scope is limited to government administered and mainly national programs for smallholders, and does not cover industrial forestry nor the many smaller programs supported primarily by NGOs and other private agents. The Community-Based Forest Management (CBFM) and Community-Based Resource Management (CBRM) programs are then examined in more detail. Next, a synthesis is made of the reported experiences and some personal observations, of the strengths and weaknesses of the various programs. Concluding comments follow.

BACKGROUND TO FORESTRY SUPPORT PROGRAMS

Concern arose in the 1960s and 1970s over rapid deforestation of the Philippine uplands. As noted by Gerrits (1996), the government and urban population place much of the blame on squatters or slash and burn cultivators or *kaingineros*. The Revised Forestry Code legislation in 1975 strengthened state control over native forests and remains the basis of current forestry regulations. The government claimed all lands with a slope of 18% or more, including mountainous land over 600 m in altitude, as public domain under the control of the Forest Management Bureau of the DENR (Gerrits 1996).

Reforestation¹ in the Philippines has been promoted by a number of laws and support programs. Notable among the laws have been (PCARR 1982, p. 4):

- a) PD (Presidential Decree) 705, requiring timber licensees to undertake reforestation on their concessions;
- b) LOI (Letter of Instruction) 423, directing active cooperation and participation of government agencies in government reforestation programs²;
- c) PD 1153, requiring every citizen 10 years of age or above to plant one tree every month for five consecutive years;
- d) Memo. Circular 985, requiring local governments to establish and maintain seedling nurseries.

¹ PCARR (1982, p. 1) made a distinction between establishing forests on areas not previously forested (aforestation) and on areas 'recently cleared of forest or with insufficient vegetative or forest cover' (reforestation). Both will be referred to as reforestation here.

² LOI 423 also set up one of the support programs, viz. the Program for Forest Ecosystem Management.

These laws were relatively widely implemented but were later repealed or amended to keep up with demands of the times and with technological advances.

The Department of Environment and Natural Resources (DENR) has the responsibility of managing all the forest lands in the Philippines, or about 16 M ha (Bisson and Wijangco 1997). As noted by these authors (p. 1), the DENR has achieved this through a variety of schemes, including

- awarding forest lands to the private sector in the form of leases and agreements, e.g. timber license agreements (TLAs), pasture lease agreements (PLAs), and industrial forest management agreements;
- declaring forest lands as civil or military reservations;
- proclaiming particular forest lands as protected area systems, watershed reservations or special use zones;
- allocating forest lands as communal forests;
- awarding forest lands to individuals, families and local communities who are found to be qualified to receive long-term stewardships and agreements; and
- recognising claims of indigenous people to ancestral domains.

EARLIER FORESTRY SUPPORT PROGRAMS

Reforestation programs have been introduced in the Philippines since the early 1970s. The *Kaingin Management and Land Settlement Regulation* was introduced under Administrative Order No. 62, in 1971, with an aim to integrate *kaingineros* into the government forest conservation programs and prevent further encroachment of shifting cultivation into forest lands. Introduced about 1974, the *Forest Occupancy Management Program* further aimed at settling *kaingineros* and stabilising their farming systems as well as improving their socioeconomic condition. There was an amnesty from prosecutions, and permits were given to occupy up to 7 ha of land for a period of two years, renewable for another two years (Gerrits 1996).

The *Family Approach to Reforestation* (FAR) program, which was also part of the *Program for Forest Ecosystem Management I* (PROFEM 1), was introduced in 1979. It was modified in 1989 under the contract reforestation scheme. This program was designed as a cost-effective means of accelerating reforestation on denuded areas by participation of local families. The Forest Management Bureau entered into 2-3 year contacts with families to establish trees on public lands, with a maximum area of 5 ha. Financial support and training were provided but not equity in the trees, with the participants expected to move to new sites after completing the establishment.

The *Communal Tree Farming Program* or *Citizen Tree Planting Program*, was introduced in 1979 (Gerrits 1996). This was designed to establish tree farms or plantations on open or denuded public forest lands and idle private lands, and make upland farmers and communities the protectors of forest lands. Maximum land areas ranged from two to 20 ha. Families were provided with a one-year provisional title, which could be converted to a 25-year title, renewable for another 25 years, if performance of the participant was satisfactory.

PROGRAMS OF THE 1980s AND 1990s

The early reforestation programs provided experience for improved program design. In the late 1980s, there was a major shift from reforestation strategies conducted by the administration to contracting schemes (Groetschel *et al.* 2001, p. 61).

The National Forestation Program (NFP)

The NFP, which ran from 1986 to 2000, provided a broad policy framework towards sustained and comprehensive efforts to rehabilitate and conserve the country's forest resources. The program was supported by loans from the Asian Development Bank (ADB), and the Overseas Economic Cooperation Fund (OECF) of Japan, and a five-year *Forest Sector Program* (FSP) was undertaken over 1988-92 to accelerate reforestation, repair environmental degradation from past logging and strengthen policies and institutions concerned with forest resources. The NFP had three main components, namely Contract Reforestation, Watershed Rehabilitation and Timber Stand Improvement. Sy (1998, p. 9) has noted that this program undertook 'reforestation of open and degraded areas and rehabilitation of critical watersheds. Rehabilitation work includes construction of silt retention dams, groins, spurs and retaining walls to stabilise streambanks; plugging of gullies with brushwood and stones; and plantation establishment'.

In the first of these programs, contracts were awarded to corporations, communities and families. Communities were paid by DENR for three years for the establishment of tree and rattan plantations, the government providing a subsidy of 20,000 pesos/ha³. Financial support was obtained through by an ADB loan. The intention was to turn the forests over to the DENR after three years, but this gave rise to concern over management costs by DENR. Subsequently, the land was allocated under *Forest Land Management Agreements* (FLMAs). The FAR program was modified under the contract reforestation scheme.

Low Income Upland Communities Project (LIUCP)

This project was implemented by the DENR to restore and sustainably manage upland forest resources and alleviate rural poverty. About 15,000 ha in eight major watersheds were treated through contract reforestation, to the benefit of about 7000 tribal and lowland migrant families.

Coastal Environment Program (CEP)

This program commenced in 1993, with a focus on habitat and ecological support systems of coastal communities and fisheries, and 'specifically their productivity, biodiversity, integrity, sustainability and equitability of access and use' (Sy 1998, p. 9).

The Community Forestry Program (CFP)

This program operated over the period 1989 to 1999, with funds from ADB and the US Agency for International Development (USAID). It aimed to provide upland residents with an alternative source of livelihood to shifting cultivation. The communities formed People's Organisations (POs), and obtained a *Community*

³ \$US1.00 = approximately 50 Philippine pesos (PhP).

Forest Management Agreement (CFMA) issued for a 25-year term, renewable for another 25 years. They were allowed to utilise and sell products from within the residual forest, and establish plantations.

The Integrated Social Forestry Program (ISFP)

This national program commenced in 1982, as a major initiative in upland development, designed to maximise land productivity, enhance ecological stability and improve socioeconomic conditions of forest occupants and communities. The ISFP 'was launched to consolidate all previous people oriented programmes' (Groetschel *et al.* 2001, p. 61), and was to be the major support program for people-oriented forestry. For example, in the Master Plan for Forestry Development, the DENR (1990, p. 116) projected an expenditure in year 2005 of 1371 M pesos for the ISFP. It covered communities in open and deforested upland areas, and also mangrove areas. As noted by Gerrits (1996), ISFP offered two forms of stewardship arrangement to upland communities. These were the *Certificate of Stewardship Contract* (CSC) for households and the *Certificate of Community Forestry Stewardship* (CCFS) for community organisations, the latter being originally known as the *Community Forestry Stewardship Agreement* (CFSA). These agreements were issued for a 25-year term, renewable for another 25 years. The program required the retention or establishment of 20% of the area awarded as permanent forest cover and planting of fruit trees and crops and installing soil and water conservation measures. With devolution in the Philippines, responsibility for ISFP was transferred in 1994 from the DENR to local government units (LGUs), except for one model site in each province. The DENR subsequently encouraged ISFP sites to integrate with CBFM (Groetschel *et al.* 2001).

Forest Land Management Agreement (FLMA)

During the period 1989 to 1995⁴, FLMAs were provided as sharing agreements between the government and individuals, communities and corporations, for plantations that were previously established under the short-term contract reforestation program, on a 25 plus 25 year tenure basis (Groetschel *et al.* 2001). This allowed family and community contractors to continue to benefit from the areas they reforested. Lacuna-Richman (2001, p. 168) argued that '[I]n essence, FLMA are 25-year plantation leases'.

Industrial Forest Management Agreement (IFMA)

Industrial Forest Management Agreements were initiated under Department Administrative Order 60, series of 1993 (FMB 1994), to support timber production when Timber License Agreements (TLAs) were being phased out. TLA holders could apply to have their license converted to an IFMA, subject to negotiations on equity shares with the DENR. IFMAs were 'designed to ensure adequate supply of timber and other forest products for domestic and export markets on a sustainable basis, while also promoting the well-being of forest-dependent communities' (FMB 1994, p. 1). The program was designed to provide a domestic supply of timber and other forest products from denuded and open forest land. Two variants of the program were introduced, depending on whether the area contained residual

⁴ Sy (1998) reported that this program was launched in 1993.

production forest (IFMA 2) or not (IFMA 1). IFMA were issued to private companies for relatively large areas (500 to 20,000 ha), under a land lease for growing trees, for 25 years, renewable for another 25 years. An example is that at Babatnon near Tacloban in Leyte Province.

Socialised Industrial Forest Management Agreement (SIFMA)

Introduced in 1994, SIFMA were agreements between the DENR and individuals and single families for areas of one to 10 ha, and for associations and cooperatives for areas of 11 to 500 ha (DENR c1998). Agreements for a 25-year tenure, renewable for a further 25 years, covered the development, use and sustainable management of plantation forests, with a primary objective of producing wood and non-wood forest products. SIFMA holders paid annual rentals, the amount varying with number of hectares and duration of the instrument (DENR 1998).

THE MAJOR CURRENT PROGRAMS

Two major national programs were introduced during the last decade, namely the CBFM program and CBRM program. These are in fact groups of programs rather than single arrangements.

The Community-Based Forest Management Program

CBFM was established under Executive Order No. 263 promulgated by President Ramos in July 1995, as a national strategy to ensure the sustainable development of the Philippines' forest resources. The strategy 'is the organised efforts of the government to work with communities in and near public forests aimed to protect, rehabilitate, manage, conserve and utilise the resources. The CBFM program integrates and unifies all current people-oriented forestry programs of the government' (Sy 1998, p. 9). The ISFP now falls within the CBFM umbrella (DENR c1998). Other programs coordinated within CBFM include the Forest Occupancy Management Program, FAR, CFP, CEP, FLMA, NFP, FSP, LIUCP and Recognition of Ancestral Domains (Sy 1998, DENR c1998). Groetschel *et al.* (2001) noted 20 CBFM projects in Leyte Province and 13 in Southern Leyte. Current Philippine forestry support programs within the CBFM umbrella are listed in Table 1.

A CBFMA entitles the community legal access to occupy, possess, use and develop an area of up to more than 1000 ha of forest land and its resources. CBFM participants are expected to produce food, cash crops, and wood for domestic and industrial uses. Local communities are organised by Community Organisers (COs) of contracted NGOs into People's Organisations to participate in the program. The Community Environment and Natural Resource Officer (CENRO) validates the application for endorsement with the Regional Executive Director of DENR.

There were initially three tenurial instruments under CBFM (DENR c1998):

1. CBFMA between DENR and the participating PO, with a duration of 25 years, renewable for another 25 years, provides tenurial security to develop, use and manage specific portions of forest lands. It is awarded in place of the various land tenure instruments, such as FLMA and CFMA.
2. *Certificate of Stewardship Contract* (CSC), is awarded to individuals or

families occupying or tilling portions of forest land, for up to a maximum of 5 ha, and has 25 plus 25 years duration.

3. CADC or *Certificate of Ancestral Land Claim* (CALC), applies to holders of these claims who opt to enter a CBFMA covering a forested portion of their claim.

Table 1. Types of community-based forest management programs currently operating in the Philippines

Program name and commencement date	Type of tenure instrument used
Rehabilitation, protection and adoption of agroforestry in occupied public forestlands (1982)	Previously <i>Certificates of Stewardship</i> and <i>Communal Forest Stewardship Agreements</i> ; now under <i>Community-Based Forest Management Agreements</i> (CBFMAs)
Rehabilitation, protection and management of Fragmented Natural Forests by communities (1989)	Previously CFMA, now CBFMAs.
Rehabilitation, protection and management of reforested areas by communities (1990)	Previously FLMAs, now CBFMAs
Protection and management of indigenous peoples' claims – alienable and disposable areas, public lands with or without forests (1993)	<i>Certificate of Ancestral Domain Claims</i> (CADC)
Rehabilitation, protection, improvement and management of natural forests by qualified organisations with the incorporation of communities in the overall management (1991)	<i>Industrial Forest Management Agreement or Environmental Protection and Management Agreement</i>
Protection and management of buffer and multiple-use zones in protected area systems (2000)	CBFMAs

As of 2001, the number and areas of agreements under these three instruments were: *Certificate of Ancestral Domain Claims* (181, 2.546 M ha); *Community-Based Forest Management Agreements* (666, 1.971 M ha); and *Certificate of Stewardship and Certificate of Forest Stewardship Agreements* (442,124, 0.815 M ha) (Guiang 2001b, p. 10-11).

In CBFM, the property rights to a forest are normally shared by many members of a community. An impressive example is the forestry operation at Alcoy in Cebu, visited by one of the authors in 2000, where over 100 farmers devoted at least one day a week to the community forest, to grow lumber and rattan. The group had further plans to develop value-adding activities. This community program, which had a high profile and attracts various overseas visitors, received considerable external funding.

The CADC is offered to 'tribal' or 'indigenous' communities that have a long history of living and working in forest areas. These agreements, established following the passage of the *Indigenous Peoples' Rights Act* in 1997, give communities permanent resource use rights, and cover relatively large areas.

CBFM continues to evolve. A recent change has been greater emphasis on individual property rights (IPR) agreements whereby individual landholders can manage and market trees, within the CBFM agreement. There appears to be some acceptance that communities may utilise some remnant timber to support their livelihoods while their common-property plantings are being established.

The Community-Based Resource Management Program

The CBRM program is designed to reduce rural poverty and environmental degradation through support for locally generated and implemented natural resource management projects (Department of Finance 1999). This \$US50M project was launched in 1998 for an initial five-year period, with the Department of Finance (DOF) as overseeing agency. An innovative financing facility was adopted, though the Municipal Development Fund concept, with a loan from the World Bank. The program provides resources to local government units to finance natural resource management projects. In particular, it enhances the capacity of low-income LGUs and communities to plan, implement and sustain priority natural resource management projects. At the same time, the program strengthens central government systems to transfer finance (as financial intermediaries) and environmental technology, and improves the implementation of environmental policies (Osita 2001).

Financial support is provided for upland resource development (including agroforestry, community-based reforestation, seedling nursery development, riverbank stabilisation and industrial tree plantations), coastal and near-shore resource development, resort development, livelihood projects, small-scale infrastructure, bridges and drainage, and water supply.

As a pilot project, CBRM operated initially in Regions 5, 7, 8 and 13. LGUs are placed in six classes; class 1 representing the highest per capita incomes and class six being the weakest financially. CBRM program offers a loan-grant-equity mix of financing to jumpstart LGU development efforts, recognising that fourth to sixth class LGUs have limited repayment capacity. For environmental projects, class 4-6 LGUs are provided with 70% grant and 20% loan and required to have equity finance of 10%. In contrast, the levels for a class 1 LGU are 20%, 60% and 20%. The finance mix is less generous for infrastructure and revenue generating projects.

The approval process is time consuming, and requires a detailed proposal document. Groetschel *et al.* (2001) noted the implementation of CBRM programs by about 20 LGUs in Region 8, most in Samar.

THE EVOLUTION OF SUPPORT PROGRAMS

The review reveals that forestry support programs have progressed through a number of stages, with policies changing on the basis of experience and perceptions of needs. Some of the major impressions are:

- initially, command and control forest laws were introduced, but did not succeed;
- programs were introduced in 1970s as cost-effective measures to settle shifting cultivators, generally by means of short-term agreements (although the one-year provisional titles under the *Communal Tree Farming Program* had an option for conversion to 25 year leases);
- contract reforestation was introduced in the mid-1980s with involvement of private sector, for timber production and watershed rehabilitation, but areas treated proved costly to maintain;
- the current community forestry model effectively commenced with the *Community Forestry Program* in 1989, including involvement of community organisation and 25 + 25 year tenure duration; and
- there were stages of consolidation of programs, including those under the *Integrated Social Forestry Program* in the 1980s and CBFM in the 1990s;
- in the last decade there has been continuing refinement of the flagship CBFM program, with increased emphasis on tree growing by individual smallholders, and introduction of the *Community-Based Resource Management Program* with its wider stakeholder involvement and resource management objectives.

While problems continue to exist in forestry support programs, this progressive refinement marks the Philippine arrangements as progressive and innovative, and provides lessons for forestry programs in other developing countries.

CRITICAL REVIEW OF FORESTRY SUPPORT PROGRAMS

How successful have the forestry support programs been, and what lessons can be learnt for fine tuning of current programs or planning of future programs? Some tentative conclusions can be drawn from consideration of the program arrangements, critical reviews in the literature, and on-site observations.

Specific performance indicators

A number of criteria or indicators could be devised by which to evaluate the performance of the various forestry support programs, such as:

- area planted, number of trees planted, number of trees surviving;
- degree of satisfaction by participants;
- cost-effectiveness of tree planting or of timber production;
- quality of silviculture, including pruning, thinning and weed control ;
- amount of timber produced ;
- amount of non-wood forest products produced;
- quality of timber produced;
- extent of community value-adding to timber harvested;
- improvement in livelihood of households in community forestry areas;
- extent of on-farm independent planting stimulated by the programs;

- extent to which communities have become protectors of the forest, and illegal logging has been reduced in community forestry areas; and
- long-term sustainability of community organisations and reforestation activity.

While an evaluation in terms of these indicators would be highly informative, and partial information is available on some of the indicators listed here, a comprehensive evaluation would be extremely difficult to perform. Some information about areas planted is available from web sources, as reported in Tables 2 to 4. The total CBFM area is approximately 1.5 M ha, while IFMAs account for over 0.9 M ha (almost all in agreements of over 200 ha) and SIFMAs account for only 0.035 M ha. Three quarters of the SIFMA planting area is in agreements of 100 ha or more, but more than 90% of the agreements are for areas of less than 10 ha.

Table 2. Area planted in Philippine CBFM programs, by size class, 2003⁵

Size class (ha)	Number of agreements	Number of households	Average number of households per agreement	Average area per household (ha)	Total area per class (ha)	Share of total area by class (%)
≥10,000	13	23,799	1,831	8.69	206,928	13
5,000 - 9,999	42	41,483	988	6.41	266,108	17
2,000 - 4,999	154	67,598	439	7.09	479,220	30
1,000 - 1,999	192	47,650	248	5.57	265,564	17
500 - 999	264	38,763	147	4.63	179,341	11
200 - 499	405	44,890	111	2.95	132,516	8
100- 199 ha	225	18,525	82	1.69	31,396	2
50 - 99 ha	148	12,700	86	0.81	10,308	1
20 - 49 ha	87	6,115	70	0.48	2,959	0.2
< 20 ha	44	2,208	50	0.21	472	0.0
Missing size	3	219	73	0.00	0	0.0
All BFMA's	1,577	303,950		5.18	1,574,813	100

Source: DENR (2004).

Qualitative review of program performance

Literature review and field observation provide some insights into program performance.

Capacity to overcome constraints to tree growing

Various research projects have identified a wide range of constraints on smallholder forestry. In this context, from a household survey in four communities Emtage (2004) noted the following constraints in order of importance: lack of access to land for tree planting; lack of finance to pay for tree growing needs; concern over

⁵ These figures include 55 CBFMAs in Leyte and Biliran Islands with a total area of 42,296 ha which involve 6,092 households.

security of tenure; unavailability of seedlings; policies related to tree harvesting; lack of labour to tend trees and risk of additional fees. In focus group discussions reviewing the survey findings, the issue of the lack of markets for tree products was also highlighted. Other constraints are listed by Venn *et al.* (2001) and by other papers in this issue. Community forestry programs do to some extent overcome the major constraints of access to land, tenure security and finance.

Table 3. Areas planted under Industrial Forest Management Agreements (IFMAs)

Size class (ha)	Number of agreements	Total area of class (ha)	Share of total area by class (%)	Share of class cancelled or suspended (%)
≥20,000	10	315,386	34	19
10,000 - 19,999	16	211,843	23	10
5,000 - 9,999	14	98,050	11	29
2,000 - 4,999	33	109,074	12	40
1,000 - 1,999	35	49,671	5	42
500 - 999	127	109,403	12	38
200 - 499	61	19,021	2	57
100- 199	27	3,415	0	56
Less than 100	1	49	0	0
All IFMAs	324	915,913	100	41

Source: DENR (2004).

Table 4. Areas planted under Socialised Industrial Forest Management Agreements (SIFMAs)

Size class	Number of agreements	Cumulative total ha	Total ha per class	Percent of total area by class
500 - 999 ha	25	12,500	12,500	35
200 - 499 ha	31	23,675	11,175	32
100- 199 ha	20	26,345	2,669	8
50 - 99 ha	6	26,716	371	1
20 - 49 ha	2	26,797	81	0
10 - 20 ha	2	30,655	3,858	11
5 - 10 ha	637	33,929	3,273	9
2 - 5 ha	625	35,195	1,266	4
< 2 ha	208	35,368	173	0
All SIFMAs	1,556		35,368	100

Source: DENR (2004).

Relationships between stakeholder groups

One criterion of performance is the quality of relationships between communities and government, NGOs and other agents involved in smallholder forestry, in terms of trust, service quality, approval processes and consistency across programs. The

various forestry stakeholder groups and their roles and inter-relationships have recently been examined by Emtage (2004a, and this issue). It is apparent that some tensions have arisen between stakeholder groups. Difficulties and delays in obtaining tree registration and harvest approval would appear to be a major issue of concern of smallholders. Lack of government support for communities in the control of illegal logging appears to be a source of frustration for community organisations (Emtage this issue, Tarun-Acay 2004).

Perspectives presented in commentaries on programs

Many reports and articles have been written about CBFM and its predecessors in the Philippines. Gerrits noted that there had been widespread criticism of the ISFP, observing that:

two criticisms of the program stand out. First was the failure to utilise a bottom-up, participatory, flexible, and responsive extension system, although the diversity of the Philippine upland environment clearly required such an approach ... Second was the inability to recognise and respond to the failure of the program caused by the lack of a farming systems approach and the widespread promotion of technologies with narrow recommendation domains. (Gerrits 1996, pp. 25-26).

Gibbs *et al.* (1990, cited by Gerrits 1996, p. 5) characterised ISFP as 'a premature attempt to create a national program when the factors causing the lack of success of programs introduced in the 1970s had not been removed and the capacity and resources for a major new program were unavailable'.

In general, program evolution has been in the direction of greater community participation, and 'bottom-up' program design. However, some observers remain critical of the achievements in this respect. According to Lacuna-Richman:

despite large infusions of monetary incentives and widespread agreement on the benefits of such [reforestation] programs, very few could be considered worth the investment. One of the main reasons for this lack of success is the absence of participation at the local level. Another reason is the difficulty of ensuring that this participation, if established, contributes perceptibly to achieving program goals. (Lacuna-Richman 2001, p. 163).

In terms of production forestry, IFMAs followed the Timber License Agreements, and appear to have been a step towards more sustainable forest utilisation. Their introduction does not appear to have been trouble free, however, Saastamoinen (2001) noting suspension of agreements due to the unauthorised logging in areas intended for forest protection.

Duration of property rights in IFMAs and now in CBFM has presented some concern to smallholders. According to Bernas (2000, as quoted by Saastamoinen 2001, p. 99), 'the present tenurial systems do not assure stakeholders and investors of a long-term or semi-permanent arrangement. The present systems can accommodate one-cutting, possibly two-cutting systems only'. This comment would appear to be particularly pertinent with regard to the planting of slow growing high-value indigenous tree species, including molave and lauan. There are environmental reasons why these native species should be promoted, and if the uptake rate is high then there would be reason to review the tenure duration arrangement.

The sustainability of CBFM remains open to question. It is not clear whether international agencies including the World Bank and Asian Development Bank will continue to make substantial amounts of funding available to assist the program, and whether the program would be more or less successful without this funding. Lacuna-Richman (2001, p. 170) argued that it is the external agent (e.g. government and NGOs) and requirement for 'increased funding from multilateral agencies that destroys the cohesiveness necessary for participatory [forest] management to work'. Various other issues concerning the performance of CBFM in the Philippines are raised in the following papers in this volume.

CONCLUDING COMMENTS

A plethora of measures have been introduced by the Department of Environment and Natural Resources and other agencies in the Philippines to promote reforestation for increased timber resource availability, improved livelihoods of smallholders and environmental protection. These have placed priority on smallholder (community and farm) forestry.

Current forestry support programs in the Philippines draw on extensive experience, from implementation of a substantial number of programs over about 30 years. As programs have been implemented and then replaced, the DENR and other agencies have no doubt gained substantial insights into identifying arrangements which work and those which fail. National government administrations and the DENR executive have attempted to refine the programs by revising the regulations covering CBFM and CBRM through issuing a series of Executive and Administrative Orders. This has improved the operation of the programs but has increased the complexity of interpreting the regulations. Unfortunately, national government administrations since 1990 have been unable to pass much-needed revisions to national forest and other natural resources management legislation that would correct the inconsistencies and inadequacies of the existing regulations (UNFAO and FMBDENR 2003).

Community forestry programs appear to require substantial organisational and financial support to become established. Low incomes of smallholders and shortage of funds by government agencies have constrained the options available for smallholder forestry programs. There has been high optimism but some unfulfilled expectations and disappointment associated with these programs. On Leyte Island in particular, the degree of success has been mixed and it is not yet clear to what extent smallholder reforestation objectives will be achieved. There is a need for further research into the level of success of forestry support program, including identification of constraints and avenues for cost-effective targeting of the limited funds available for support programs. It is becoming apparent that there are some advantages in adopting a policy to support individual property rights to tree planting, as distinct from common property planting, for example with respect to tree protection (e.g. weed control and surveillance).

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